

## CLAIMS

What is claimed is:

- 1    1.     A method for detecting the presence of contamination in a nucleic acid  
2        amplification reaction conducted on a sample, comprising the steps of:  
3                conducting a first nucleic acid amplification reaction in said sample,  
4        wherein at least one first nucleic acid primer used in said first nucleic acid  
5        amplification reaction comprises a first portion that is complementary to a nucleic  
6        acid sequence in said sample, the amplification of which is desired, and a second  
7        portion that is not complementary to said nucleic acid sequence;  
8                conducting a second nucleic acid amplification reaction in said sample  
9        wherein at least one second primer used in said second nucleic acid amplification  
10       reaction is complementary to said second portion; and  
11               detecting contamination in said sample as the presence of amplicon in said  
12       second nucleic acid amplification reaction.
- 1    2.     The method of claim 1, wherein said second portion is not complementary  
2        to any contiguous nucleic acid present in said sample prior to said first nucleic  
3        acid amplification reaction.
- 1    3.     The method of claim 1, wherein said first nucleic acid amplification  
2        reaction is selected from the group consisting of PCR, Q-PCR, and reverse-  
3        transcriptase PCR.
- 1    4.     The method of claim 3, wherein said second nucleic acid amplification  
2        reaction is selected from the group consisting of PCR, Q-PCR, and reverse-  
3        transcriptase PCR.

1 5. The method of claim 1, wherein said amplicon is detected by sequence-  
2 specific nucleic acid probe capture.

1 6. The method of claim 1, wherein said first and second nucleic acid  
2 amplification reactions are conducted simultaneously.

1 7. The method of claim 1, wherein said first and second nucleic acid  
2 amplification reactions are conducted on DNA isolated from said sample.

1 8. A method for detecting contamination in a nucleic acid amplification  
2 reaction conducted on a sample, comprising the steps of:

3 conducting a first nucleic acid amplification reaction in said sample using  
4 at least one chimeric primer comprising a template-specific sequence and a 5'  
5 contamination detection sequence;

6 conducting a second nucleic acid amplification reaction in said sample  
7 using at least one primer that is substantially complementary to said contamination  
8 detection sequence; and

9 detecting an amplicon produced in said second nucleic acid amplification  
10 reaction, the presence of which being indicative of contamination in said sample.

1 9. The method of claim 8, wherein said first nucleic acid amplification  
2 reaction comprises two chimeric primers.

1 10. The method of claim 8, wherein said second nucleic acid amplification  
2 reaction comprises two primers that are complementary to said contamination  
3 detection sequence.

1 11. The method of claim 8, wherein said sample is a biological sample.

